



Indoor bamboo in an apartment

Use bamboo plants to add O₂



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The Indoor Air Quality Association (IAQA), has arrived in India! It is perhaps the first association focused on indoor air quality (IAQ), in our country. Significantly this chapter is among the few outside the United States. Aimed at bringing together professionals to identify and solve issues pertaining to indoor environment, the ultimate beneficiaries are the public. It will improve indoor air quality by bringing about awareness and educate people. So let's wake up to IAQ issues and get cracking!

IAQ can be quite complicated as it has many aspects to it. It deals with levels of various toxins such as Volatile Organic Compounds (VOC), Carbon Dioxide (CO₂), suspended particulate matter including bacteria and the common mold. It also deals with temperature and humidity control. While it is common knowledge that higher the concentration of CO₂ in a space, the worse it is, only a few actually understand the difference between proper ventilation and the 'oxygenation' of spaces.

While most architects and developers today understand ventilation (aka ways to get rid of the exhaled CO₂), it takes an astronaut to teach us about oxygenation!

Oxygenation is the addition of oxygen to an entity — whether it is the human body, an oxygen tank, an astronaut's suit or the space aboard a space craft. A lot of research on oxygenation, interestingly enough is carried out by space agencies; only because there is none in that environment! How is this relevant? If the focus shifts to adding O₂ to indoor air instead of only obsessing about flushing out of CO₂, then the quality of indoor air would improve too!

At the beginning of the millennium, NASA led a Clean Air Study along with the Institute of Landscape Architects specifically to identify species of plants that can effectively behave as filters for common toxic agents in the air. The effects of benzene, formaldehyde and other such agents which usually cause the 'sick building' syndrome were sought to be neutralized by the addition of plants.

Some of these plants that are part of the NASA list are easily available in our country and grow very well indoors with limited sun exposure.

The top performer in this list is the Variegated Snake Plant (commonly known as Mother in law's tongue) with others like Bamboo Palm, Rubber Plant and even Aloe Vera following quite closely. With the ability to filter the air from toxins, the Snake Plant is also known for its high oxygen emitting capabilities. It is said that 6-8 waist high snake plants can keep one person alive even if there was no air flow!

A study at The Royal College of Agriculture in Cirencester, England, found that students demonstrate 70% greater attentiveness when they are taught in rooms containing plants. Indoor plants like the Bamboo Palm not only add oxygen but also filter the air from xylene, toluene and convert a heck of a lot of CO₂ to easy-breathing oxygen.

Think indoor air and think green — it is soothing, fresh and keeps your lungs happy!